

Remarks

Entry of the above amendments is requested for the purpose of distinguishing the claimed invention from the references cited and applied against the claims.

With reference to the rejection of the previously presented claims under 35 U.S.C. 102(b) as allegedly anticipated by the disclosure of U.S. Patent No. 4,734,862 to Marcus et al. (the '862 Marcus reference), it is respectfully submitted that the invention defined by the current claims is neither anticipated by, nor obvious over, the disclosure of the '862 Marcus reference for the following reasons. The Marcus '862 reference is directed to a conflict monitor for traffic control systems of the type disclosed in the introductory section of the subject application. The Marcus '862 system monitors the traffic control signals, and the pedestrian WALK and DON'T WALK pedestrian advisory signals, and tests for conflicts in the conventional manner described in the introductory section of the subject application. Conflicts are stored in memory and are displayed using a plurality of LED indicators. The only specific examples given of conflicts in the Marcus '862 reference are a "green"- "green" conflict (Col. 1, lines 28-31); a "green"- "WALK" conflict (Col. 1, lines 35-38); and a "green"- "green" conflict between channel 1 and channel 2 (Col. 7, line 67-Col. 8, line 2). These conflicts all require a full ON operation of the conflicting signals. Marcus is absolutely silent with respect to testing for conflicts involving flashing DON'T WALK control signals.

In contrast, independent system claim 1 is expressly directed to a system for testing for conflicts between flashing DON'T WALK control signals- and traffic light control signals. While the Examiner has cited Col. 1, lines 31-40 of Marcus for the supposed teaching of detecting a conflict between a flashing DON'T WALK input signal and other traffic control signals, there is nothing in the referenced text which supports this assertion. The referenced text reads in full "In

addition, a conflict monitor may measure the duration of the green, yellow, or red lights and indicate a fault if these durations meet or exceed predetermined time periods. The “walk” and “don’t walk” signals may be considered in a manner similar to that of the colored traffic signals so that a “conflict” may include such errors as providing a “walk” signal across a lane of traffic receiving a green light”. This prior art technique is more thoroughly described in the introductory section of the present application (on page 1, lines 11-19), where it is explained that only continuously activated DON’T WALK signals are monitored in prior art devices for conflicts with other signals. As noted in lines 19-31 of page 1 of the present application, this prior art technique for conflict monitoring allows the potentially dangerous set of conflicting signal conditions between a flashing “don’t walk” pedestrian signal and a “green” vehicle signal for an intersecting vehicle lane, since this is not perceived as a conflict in prior art devices. While the Examiner has noted that it is “old and well-known that DON’T WALK control signals is [sic] flashing”, this observation is entirely off the mark. The fact that one may observe a flashing DON’T Walk advisory light at an intersection does not imply that the control signal used to flash the light is being monitored for conflicts with other traffic light control signals. In fact, as noted on page 1 of the subject application, in prior art devices the control signal used to flash the DON’T WALK light has not been monitored for conflicts with other traffic light control signals. Absent any such teaching in the prior art, the Examiner has not made out a *prima facie* case for unpatentability. Consequently, it is respectfully submitted that claim 1 is clearly patentable over the disclosure of the Marcus ‘862 reference.

Claim 2 is now directed to a manually settable switch means for enabling and disabling the means for monitoring for conflicts between flashing DON’T WALK control signals and traffic light control signals. The claimed switch means enables the operator to select whether or not this functional capability is to be used in a given installation. The switch 10 shown in the Marcus ‘862 reference and cited by the Examiner serves an entirely different purpose-viz., to cause the microprocessor 2 to activate the display 14 to display the status of each channel at the time a prior conflict occurred (see Col. 3, line 66-Col. 4, line 1; Col. 8, lines 25-51). There is nothing in Marcus ‘862 which directly teaches or inherently suggests the use of switch 10 (or any other switch) to enable and disable the

conflict monitoring means. While the Examiner has chosen to disregard this statement of functionality, the limitation of claim 2 has now been cast in terms of *means-plus-function* form. As such, the Examiner is required to accord patentable significance to this limitation. Since the Marcus reference teaches a switch configured for an entirely different function, there is no evidence of record to support the Examiner's conclusion of unpatentability. Accordingly, it is respectfully suggested that claim 2 is clearly patentable over the disclosure of the Marcus '862 reference.

Claim 3 is now directed to a display means for indicating whether the means for monitoring for conflicts between flashing DON'T WALK control signals and traffic light control signals is enabled. This claimed display means provides a visual indication to the operator that the monitoring means is operational. While the Examiner has cited display 14 of Marcus '862 as an alleged anticipation of this claim, it is respectfully submitted that the Marcus '862 display does not possess this functional capability. The Marcus '862 display is described in Col. 4, lines 2-5; Col. 7, lines 52-668; and Col. 8, lines 1-52. As clearly taught in these portions of the reference, the display 14 provides visual indications of the status of each of the channels during prior conflicts or other prior errors. There is nothing in Marcus '862 which teaches directly or inherently suggests providing a display for the purpose of indicating the operational status of the means for monitoring for conflicts between flashing DON'T WALK control signals and traffic light control signals. This is not surprising, since the Marcus '862 system has no provision for enabling and disabling this special monitoring system. Consequently, it is respectfully submitted that claim 3 is clearly patentable over the disclosure of the Marcus '862 reference.

Claim 4 further defines the display of claim 3 as one which includes a plurality of display units assigned to different channels for indicating those channels for which the monitoring means is enabled. In the system according to the invention, it is possible to enable the monitoring means for specific channels, and the display of claim 4 provides a visible indication to the operator of which channels (if any) are so enabled. Since there is nothing in Marcus '862 which teaches a single enablement display, *pari passu* Marcus fails as a teaching reference for the display of claim 4. The Examiner's characterization of the

limitation of this claim as one which merely requires a plurality of display units assigned to different channels is incomplete and thus off the mark. Claim 4 specifically recites a plurality of display units assigned to different channels for indicating those channels for which said monitoring means is enabled. There is nothing in the Marcus reference which teaches directly or inherently suggests such a plurality of display units.

Claim 5 is directed to the method of monitoring for conflicts between flashing DON'T WALK signals and traffic light control signals which requires the steps of detecting a flashing DON'T WALK pedestrian advisory sign control signal, detecting the states of other (traffic light) control signals, and generating a conflict signal when a conflict occurs between a flashing DON'T WALK signal and at least one of the other control signals. As discussed above in detail, Marcus '862 neither teaches directly nor inherently suggests monitoring flashing DON'T WALK pedestrian advisory control signals. Consequently, it is respectfully submitted that method claim 5 is clearly patentable over the disclosure of Marcus '862.

Claim 6 is the method counterpart to dependent system claim 4 and covers the display of enabled channel information. Specifically, this claims adds the step of providing a display of those channels on which the step of generating a conflict signal is enabled. For the reasons advanced above with regard to claim 4, it is respectfully submitted that method claim 6 is clearly patentable over the disclosure of Marcus '862.

Method claim 7 is directed to manually enabling the step of generating a conflict signal, and is the method counterpart to dependent system claim 2. For the reasons advanced above with regard to claim 2 it is respectfully submitted that method claim 7 is clearly patentable over the disclosure of Marcus '862.

Dependent system claim 8 and dependent method claim 9 are directed to the minimum persistence feature described in the subject application on page 6, in lines 15-25. In particular, to avoid false generation of a conflict signal, in the preferred embodiment the flashing DON'T WALK conflict must persist for a minimum time period (1500 msec. in the specific example given) before the conflict signal is generated. It is respectfully submitted that these claims are clearly patentable over the disclosure of Marcus '862 for reasons already

advanced above, and for the additional reason that there is no teaching in the Marcus reference of any such minimum persistence requirement.


Dependent method claim 10 is the method counterpart to dependent system claim 3 covering the display of the enabled state of the monitoring means. For the reasons advanced above with regard to claim 3 it is respectfully submitted that method claim 10 is clearly patentable over the disclosure of Marcus '862.

The remaining references have been carefully considered, but are not seen to supply the deficiencies noted in the Marcus '862 reference.

In view of the above remarks, it is respectfully submitted that this application is clearly in condition for allowance. Accordingly, the Examiner is respectfully requested to pass this case for issue.

If deemed useful in any further prosecution of this application, the Examiner is invited to contact the undersigned at 702-270-8853.

Respectfully Submitted,


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